

information, including auto activate start information. A console interface has wireless receiver circuitry for receiving the game information, including the auto activate start information, from the controller and modifies the game information so that an activate signal is continuously sent from the console interface to the console and at least one object in a game being played with the video game system is continuously activated.

According to an aspect of the present invention, when an auto activate start signal such as a rapid fire signal is sent from a wireless controller, the console interface recognizes the signal and continuously sends the activate signal to the console. Accordingly, the wireless controller need not continuously send the auto activate start signal to the console interface. This extends the life of the power supply of the wireless controller and enables the wireless controller to be provided with a sleep function.

Previous wireless controllers include a rapid fire function. However, none of these previous wireless controllers addresses the problems to which the present invention is directed, and none provides the auto activate start feature of the present invention. For example, U.S. Patent 4,924,216 (Leung) relates to a joystick controller apparatus. Fire switches 20 and 22 are provided. A switch 34 is provided to select an autofire or repetitive output signal for fire switches 20 and 22. When autofire is on, a repetitive output in the relevant bit position is provided as long as switch 20 or 22 is depressed. That is, when autofire is depressed, a repetitive fire signal is always output from the wireless joystick.

U.S. Patent 4,870,389 (Ishiwata et al.) relates to a joystick for a computer game. When a function button is pressed down while a trigger button is depressed, a continuous fire signal is output by the joystick.

U.S. Patent 5,648,797 (Lam) relates to a triggering circuit for use with a computer game joystick. When an automatic firing circuit having a pulse generator is used and the computer system takes a significant amount of time to recognize the automatic firing command, Lam attempts to overcome this problem by identifying the frequency of the game port input for each computer system and automatically and continuously optimizing the frequency of the automatic firing generating circuit for each computer system and game individually.

However, Applicants find no teaching or suggestion in Leung, Ishiwata or Lam, each taken alone or in any combination, of a controller having at least one user operable switch and wireless transmitter circuitry for transmitting game information, including auto activate start information and a console interface having wireless receiver circuitry for receiving the game information, including the auto activate start information, from the controller. Nor do the references disclose or suggest modifying the game information so that an activate signal is continuously sent from the console interface to the console.

U.S. Patent 4,531,740 (Green et al.) relates to a remote control system for a video computer game. Reset and game select signals are sent from a wireless controller to an actuator unit which is physically mounted onto the master control center. The actuator includes mechanical actuator mechanisms that mechanically engage the reset and game selector buttons on the master control center. The wireless controller includes a firing button that generates a signal each time the firing button is depressed.

U.S. Patent 5,098,110 (Yang) relates to a method for remotely controlling a video game system of a video game apparatus. Information transmitted by first and second wireless transmitters are modulated by the same carrier frequency and transmitted to a receiver of a video game apparatus. In order to identify the source of each of the received transmission cycles, a transmitter-identifying code is incorporated in each transmission cycle.

U.S. Patent 5,632,680 (Chung) relates to a method and apparatus for controlling a computer game. The game has a pulse position modulated input device for encoding status information in a pulse position control signal. A bimodal interface has a first and second interface circuits, each for coupling an input device to a computer game program. When the bimodal game input port is coupled to a PPM input device, the received pulse position control signal is decoded with improved accuracy and speed. When the bimodal interface is coupled to a conventional input device which generates a variable resistance input, the second interface is used to decode control signal.

However, Green, Yang and Chung are not understood to teach or suggest any of the elements missing from the other references that would have made the claimed

invention obvious to a person of ordinary skill in the art.

Accordingly, Applicants submit the independent claims and the claims dependent thereon are patentable over the cited art.

The Office is hereby authorized to charge any additional fees which may be required in connection with this Petition and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Granting of this Petition and prompt consideration and allowance of this application are respectfully requested.

A handwritten signature in black ink, reading "Robert D. Katz", written over a horizontal line.

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